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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Burrrhus Lang

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EXAMINER

BOCKELMAN, MARK

ART UNIT

PAPER NUMBER

3766

MAIL DATE

DELIVERY MODE

07/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/030,519	Applicant(s) LANG ET AL.	
	Examiner Mark W. Bockelman	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 3/26/09, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below (MPEP 1207.04).

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Carl H. Layno/

Supervisory Patent Examiner, Art Unit 3766.

Response to Arguments

Applicant's appeal brief filed 11-13-2008 is noted however, upon further consideration, a new ground(s) of rejection is made in view of King USPN 4,282,886.

Claim Rejections - 35 USC § 101

Claims 16- 36 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility as well as usefulness. The invention as claimed seems to defy engineering principles in that the claims merely recite two pieces of metal that may or may not be used as a circuit. The examiner emphasizes that applicant claims nothing more than two pieces of metal. Only claim 19 requires that the two pieces of metal be on a single carrier. The evidence submitted by the applicant shows that a Circuit that uses a return electron with a surrounding RING on a common carrier appears to help reduce heating when a high frequency carrier stimulation current is applied therebetween. Contrasting this demonstration with the two pieces of metal with some intended use that make up the current claims seems to be the best way for the examiner to make his point. The examiner's best guess as to why applicant's demonstration shows the results that they do may be due to it following the principle of Gauss's law, which is used to demonstrate that if you have a point charge in between a conducting surface, such a sphere, the electric field is essentially zero in between the surface. See attachment. Thus the examiner concludes, as evidenced by the demonstration, that applicant needs to recite the "contactless" electrode to be a ring, essentially fully surrounding the inner electrode for it to be operable as claimed. The examiner notes that "partially" surrounding doesn't seem to add any benefit and if the active electrode is placed on the opposite side of the partially surrounded return electrode there is no benefit because the electric field would be concentrated between

Art Unit: 3766

the two electrodes, acting as point charges. The examiner notes that the demonstration is directed to high frequency stimulation, there would be no apparent benefit for sensing. The examiner again notes that all of the demonstration of results is directed to a system, the two pieces of metal as recited do not offer the results that applicant wishes to hinge patentability on. The examiner also considers the claims to not comply with the usefulness of portion of 101. The device as claimed with two pieces of metal is outside the usefulness as disclosed by applicant.

Claim Rejections - 35 USC § 112

Claims 16-36 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the arrangement shown in the Raiser et al reference, does not reasonably provide enablement for the invention to the scope as claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to achieve the invention commensurate in scope with these claims. Applicant's claims seem to require, at a minimum, a ring surrounding an electrode to achieve the properties that are said to make up the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3766

Claims 16-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16-35 use a negative limitation that is indefinite in using the word “uncontacted”. Applicant’s “uncontacted” conductor is actually contacted by a common carrier. In addition Any metal surface on applicant’s ring can be used as a contact or not. The term is indefinite and the claim is indeterminable in scope.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-28, 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Canadian patent 1,219,642.

Canadian patent 1,218,642 shows several embodiments of electrode configurations. In figure 3, 3 potential electrode elements 30, 33, 36 are shown that extend to a tab 32 with three uncontacted elements. The elements are each capable of being contactable by an electrode or can be consider “free” of a contacting element depending upon the intended use. Applicant’s circular rings as shown in their drawings are all capable of being contacted by an electrical energy applicator. Thus, the examiner

Art Unit: 3766

designates which elements are contactable in terms of intended use in interpreting applicant's claims. In claims 16-21, 23-28, 30 and 32 the examiner considers the contactable conductor to be electrode 30 and the uncontacted conductor to either elements 33 and/or 36. Regarding claims 22, the examiner considers the inner uncontacted conductor 33 to extend into the space between contactable conductors 30 and 36. Regarding claim 31, the examiner considers the conductors to be formed in alternative (interleaved) surfaces (figure 4) wherein starting with the most inner conductor, every other conductor is contactable and the others are uncontacted. The method step would be inherent since the method does not require the uncontacted metal surface to remain unconnected to the electrical stimulator. If applicant were to amend the method claims to state that the uncontacted conductor is not connected electrically to the electrical stimulator during electrical stimulation the examiner would look favorably upon the claims.

Claims 16-21, 23 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by King USPN 4,282,886.

King shows an electrode 14 with a contactable surface that engages tab 14a. A piece of conductive foil 16a surrounds the electrode. The device would inherently include circuitry for heat applications.

Claim Rejections - 35 USC § 103

Art Unit: 3766

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Canadian patent 1,219,642. It is unclear as to which figure, if any, applicant has drafted claim 29 to cover. It appears that applicant considers two radially spaced contactable electrodes to have “substantially equal” surface areas and peripheral lengths. Since radially spaced electrodes would have both their peripheral lengths and surface areas vary as a function of the radius, it would appear that “substantially equal” has a fair degree of latitude. In this respect, the examiner considers the hook configurations of the the various conductors in figure 4 of the Canadian reference to have “substantially equal” surface areas and peripheral lengths, and or it would have been obvious to modify the thicknesses of the electrodes to within such a range as an obvious design choice.

Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian patent 1,219,642. The claim reads upon the intermediate configuration of hooking up the electrode to the device of use wherein one contact is connected and the other not. This is not regarded as patentable subject matter over the Canadian patent.

Art Unit: 3766

Claims 17, 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over King USPN 4,282,886 in view of Canadian patent 1,219,642. To have provided additional electrodes in the arrangement shown by Canadian patent 1,219,642 would have been an obvious inclusion for bipolar applications.

Claims 33- 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over King USPN 4,282,886. To have placed the King electrode against the tissue to test the functioning of the device prior to removing the outer conductor for permanent attachment would have been an obvious procedure.

Response to Arguments

Applicant's arguments with respect to claims 16-36 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272 -4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3766

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark W Bockelman/
Primary Examiner, Art Unit 3766